UAE Adoption of Digital Authoritarianism Weakens US Security and Portends Soft Power Shift

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Executive Summary

Recent efforts by the People's Republic of China to spread its model of digital authoritarianism and related technologies to the United Arab Emirates (UAE)—a key US ally and a rising cultural, political, and financial power within the Middle East region and throughout the world—present a significant threat to US military objectives and economic stability and portend a wider shift in soft power as the UAE moves philosophically closer to China and paves the way for other nations to do the same. In order to maintain robust relations with a key regional partner, the US must bolster its alliance with the UAE via positive diplomatic, economic, and military interaction.

Although digital authoritarianism, which is commonly defined as the use of digital information technology by authoritarian regimes to surveil, repress, and manipulate domestic and foreign populations,[1] can be found in many different nations, the most extensive form is used in China. Recent efforts by the Chinese government to spread its model of digital authoritarianism, which is characterized by mass surveillance and the use of artificial intelligence technology, have extended to a number of nations around the globe. While the sum of these endeavors presents a threat to global human rights and US soft power, efforts to spread this model to the UAE present an imminent threat because the Gulf nation is both predisposed to and capable of adopting these practices. Adoption of such a model by the UAE, which is a key US military ally in defending the conflict-fraught Middle East region and the Strait of Hormuz oil routes, signals a budding philosophical alignment with China and weakens the existing US-UAE alliance that is necessary to maintain regional stability and protect US oil interests. UAE progression towards Chinese digital authoritarianism also sets a dangerous precedent and increases the likelihood of other nations taking similar action—thereby placing US interests and democratic influence at risk on a global scale.

In order to successfully protect US interests in both the Middle East and throughout the world, the US must make a concentrated effort to strengthen the US-UAE alliance by enhancing existing military, diplomatic, and economic partnerships and diversifying its oil supply. Additionally, the US must address the growing global use of borderline authoritarian technologies by increasing and demarcating its own use of artificial intelligence and smart city technology with clear ethical standards, setting a global example for efficient democratic use of artificial intelligence and digital information technology without sacrificing human rights.

Introduction: The Spread of Chinese Digital Authoritarianism Threatens US Soft Power

Digital authoritarianism, which is commonly defined as the use of digital information technology by an authoritarian regime with the intention to surveil, repress, and manipulate domestic and foreign populations, can be found in a rising number of nations throughout the world. However, the most advanced and extensive practice of digital authoritarianism is found in China and is characterized by the use of artificial intelligence (AI) technology and mass surveillance. In an effort to increase its global influence and soft power, China has encouraged the adoption of its digital authoritarian model and corresponding technologies in nations around the world. These efforts pose a significant threat to US influence as adoption of such technologies moves other nations further from a philosophical alignment with the US and closer towards China—an established great power competitor to the US. The efforts of the Chinese government to spread AI-assisted digital authoritarianism to the United Arab Emirates (UAE), a key US ally in the Middle East, is a clear example of the significance of China's efforts. In order to maintain its global influence and protect its political, military, and economic interests, the US must make a concentrated effort to bolster its relationship with the UAE and address the growing use of digital authoritarianism throughout the world.

Rising Use of Digital Authoritarianism in China Creates Model for Other Nations

Use of information technology in AI-assisted mass surveillance, online censoring, collection of big data, and other digital practices began in China on a small scale in the early 2000s and has grown considerably in the past two decades to embody a digital police state.[2] Mass state-driven surveillance is used throughout the nation with an estimated 200 million CCTV cameras in use at the end of 2019.[3] While China has consistently maintained heavy surveillance within its major cities, with eight of the ten most heavily surveilled cities in the world located in China,[4] the government has expanded its surveillance efforts to include advanced facial recognition and tracking software. These systems are facilitated by government access to personal information via private industry or government regulations—such as the regulation enacted in mid-2019 which requires each citizen with a mobile phone to register a facial recognition scan with the national government.[5]

In response to the rise of mobile internet use, the Chinese government has expanded its practices to include internet and social media censorship as well as gathering location and other data from personal mobile application usage. Additionally, the Chinese government has developed apps for the purpose of monitoring its citizens, such as those used in the fight to contain COVID-19.[6] While these policies have been consistently presented as employed for the benefit and protection of the general public, some actions by the Chinese government demonstrate that such use can be manipulated to support an authoritarian regime and infringe upon basic human rights. For example, in the western region of Xinjiang, the Chinese government introduced an Integrated Joint Operations Platform (IJOP) that required citizens to download a phone app which absorbed personal data for the purpose of reporting suspicious individuals. Organizations such as Human Rights Watch and Amnesty International have called the use of such an app an "unacceptable act of repression" after it was discovered that the app was used to identify and arbitrarily detain 1 to 2 million Turkic Muslims.[7]

In several cities across the country the government has combined online monitoring systems with CCTV and facial recognition to create an extensive internal security platform known as the Social Credit System which monitors the actions of each individual and assigns them a "social credit score" based on their positive or negative contributions to society.[8] The program is currently in its beginning stages and is not consistent across all participating cities, yet most of the systems utilize facial recognition cameras as well as human reporting to track the daily actions of each citizen. The system also monitors their online activities—including their social media accounts, online purchases, and search history.[9] Citizens who exhibit actions considered to be poor citizenship, such as jaywalking, are also displayed on large public screens with the intention of shaming individuals into ceasing such behaviors. With the aid of artificial intelligence software, each citizen is assigned a social credit score which is used to reward individuals with certain privileges or impose punitive consequences, and can be viewed by government officials and local law enforcement officers.[10]

While these practices seem repressive, intrusive, and even unethical from an American perspective, a majority of participating Chinese citizens have indicated that they feel comfortable with the social credit system and have even stated that they like the program because it makes them feel safe.[11] A number of other nations around the world have governments and perhaps even populations with similar orientations and are looking for efficient ways to improve internal security and order. For these nations, China has emerged as a role model.

Chinese Efforts to Spread Digital Authoritarian Technologies Threaten US Soft Power

In addition to practicing digital authoritarianism within China itself, the Chinese government encourages the development and sale of these technologies by Chinese companies and supports their exportation to regional neighbors and developing countries. This support, as well as recent efforts to expand China's soft power, fosters warranted concern among American leadership as a rise in Chinese influence may ultimately lead to a loss in productive US global influence and subsequently place military partnerships, economic cooperation, and multilateral diplomatic action in jeopardy. The US House Committee on Intelligence stated that there is "no greater long-term strategic challenge" than a growth in China's soft power and influence on the global stage.[12]

China's efforts to expand its soft power are expressed in a variety of recent actions, one of the most notable being China's investment in an extensive global trade network called the Belt and Road Initiative (BRI) which aims to connect Asia, Africa and Europe via land and maritime trade routes.[13] The World Bank estimates that the initiative eventually will encompass over 30% of the global GDP, 75% of the world's energy reserves and 62% of the world's population[14]—at present it includes over 130 developed or developing nations, the majority of whom have joined in the past three years, and involves an investment by China of over $730 billion.[15] The initiative is closely linked to China's efforts to export digital authoritarianism, as the Chinese government has encouraged members of the Belt and Road Initiative to purchase facial recognition technology and artificial intelligence-assisted systems from Chinese technology companies and has even offered soft loans to low-income members of the initiative, including Kenya, Laos, and Uzbekistan, to subsidize the purchase of such technologies.[16]

At present, Chinese exports of digital authoritarianism-enabling technologies are largely concentrated in sales by Chinese technology companies such as Huawei and ZTE. The most successful of these technologies are smart city platforms which incorporate data analytics and automated security into a city's infrastructure in an effort to digitally detect crime, manage city traffic, and improve municipal efficiency.[17] Huawei smart city technologies have been introduced to more than 160 cities in over 100 countries and regions, with a large number of those sales contracts involving BRI member nations.[18] While the sale of such systems appears to be primarily profit-driven, Western leaders worry that the implementation of such systems will draw countries closer to authoritarianism and strengthen ties between these countries and China.

Potential Spread of Chinese Digital Authoritarianism to UAE Poses Threat to US-UAE Alliance

These efforts by the Chinese government are especially concerning when directed towards key US allies or nations in areas of conflict, such as those located in the Middle East. In the past few years, a concentrated effort is evident to increase Chinese influence in the Middle East and Northern Africa (MENA) region, as 17 MENA countries have signed on to the BRI in just the past two years. The United Arab Emirates (UAE), a federation of seven emirates located on the eastern coast of the Arabian Peninsula which recently joined the BRI in 2018, offers a key example of these efforts and a case study for their implications.[19]

As a crossroads nation between the Middle East, Africa, and West Asia, the UAE is an essential member of the BRI and has been treated accordingly by China, whose foreign minister stated that the "UAE is to become a shining pearl along the belt and road."[20] In July 2019, the deputy supreme commander of the UAE armed forces traveled to China for a state visit with Chinese President Xi Jinping and the China-UAE economic forum, where he signed off 16 memoranda of understanding related to various aspects of UAE-China relations.[21]

According to the UAE Ministry of Economy, China is currently the UAE's second largest trading partner, with bilateral trade in excess of $58 billion in 2019 and expected bilateral trade to value $70 billion in 2020.[22] In addition to successful bilateral trade, the UAE also serves as a nerve center for China's international trade. As the home of Dragon Mart, the largest trading hub outside of mainland China, more than 22% of Arab-Chinese trade and 30% of Chinese exports go through the UAE.[23] That percentage is set to increase after the completion of a 60 million square foot shipping and storage center at Dubai's Jebel Ali port—in which China invested approximately $2.4 billion.[24] Evidence of China's endeavors to expand its soft power and fortify its relationship with the UAE is also found in the sale of digital authoritarianism-related technologies by Chinese tech companies. The most notable example of this relationship is the contract between the emirate of Dubai and Huawei to incorporate the smart city platform into the city of Dubai.[25]

Even though the UAE itself does not likely view its developing relationship with China to be choosing a partner and ally to replace the US, the clear efforts made by China to expand its relationship with the UAE are particularly alarming due to the significance of the existing US-UAE alliance. In March 2020 the Bureau of Political-Military Affairs at the US State Department reaffirmed that cooperation with the UAE is crucial in supporting US interests across the region.[26] The UAE is home to significant US air and naval military bases, with Dubai's Jebel Ali port being the largest port of call for the US Navy outside of the US, as well as the Al Dharfa air base which

hosts the Gulf Air Warfare Center where approximately 3,500 US personnel are based, and which provides regionally-focused air and missile defense training for around 2,000 participants from 10 nations every year.[27] The US and the UAE also cooperate through technology and education exchange programs and coordinated military training efforts and agreements, such as the Defense Cooperation Agreement which was signed in May 2019.[28] The UAE, which has one of the fastest growing defense budgets in the world according to the Stockholm International Peace Research Institute,[29] is also a significant purchaser of US military technology with $28.1 billion worth of active government-to-government sales.[30] Technology investment and innovation firm Mubadala Company is currently engaged in contracts with US defense contractor Lockheed Martin and aerospace company Boeing to improve military aviation equipment.[31] However, the US-UAE military equipment agreements were recently strained when the US refused to sell the UAE weaponized unmanned aerial vehicle (UAV) systems such as armed Predator Drones. Several military experts suspect that due to this refusal the Emirati military has instead purchased armed Wing Loong II drones from China.[32]

A strong US alliance with the UAE is also important because of the nation's influential role in the global oil trade as a member of OPEC and the owner of the world's sixth largest oil reserves.[33] The UAE is also strategically located on the western coast of the Strait of Hormuz, which the US Energy Administration names as the world's most important oil route chokepoint, seeing a daily oil flow averaging 21 million barrels per day. Although the US imports minimum quantities of crude oil directly from the UAE, over 15% of the US oil supply is imported from other nations in the Middle East and transported through the Strait of Hormuz.[34] In both 2011 and 2018 the Islamic Republic of Iran, which is located on the eastern coast of the strait, threatened to block the crucial waterway in response to economic sanctions on the state. Although the blockade never took place, former NATO Supreme Commander Europe Admiral James Stavridis stated that if Iran had gone through with its threat the "US and our Arabian Gulf allies would be able to open it in a matter of days."[35] This crucial military capability is contingent upon a robust military alliance with the UAE. If this alliance were fractured or weakened and a successful blockade took place it would like result in intense regional or even international conflict, significant threats to US military operations, and major disruptions in the global economy due to increased transportation costs, shortages of natural resources, and high energy prices.

UAE's Rising Regional, Global Influence Increases Impact of Chinese Digital Authoritarianism

The importance of the US-UAE alliance has markedly increased over recent years as a result of the UAE's accelerating rise to prominence. The emergence of the United Arab Emirates as a global cultural and financial leader due to the Emirati government's pro-tourism and pro-business campaigns has also substantially increased the significance of the UAE's progression towards the Chinese model of digital authoritarianism. As a strategically located Gulf nation, the UAE already enjoyed positive relations with several key international actors, yet successful efforts by the Emirati government to expand tourism, cultivate a business-friendly national climate, and increase global exposure has made the UAE a cultural hub in the region and brought it to the forefront of international trade.

In 2010, the president of the UAE introduced a national agenda called *Vision 2021* which aims to "make the United Arab Emirates among the best countries in the world" by the year 2021. The agenda includes a set of national indicators in the sectors of education, healthcare, economy, police and security, justice, society, housing, infrastructure, and government services.[36] Following the introduction of the plan, the UAE has demonstrated substantial efforts in all of the above-mentioned categories and emerged as a rising power. Emirati efforts to become a cultural hub have shown significant results as the country's tourism has increased exponentially. The MasterCard Index of Global Destination Cities listed Dubai as the 9th most visited city in the world in the year 2011, but nine years into the *Vision 2021* agenda Dubai had moved up five places and was listed as the 4th most visited city in the world for the year of 2019.[37] Similarly, the index reported that for the year 2011 Dubai ranked 19th for the amount of money spent by visiting tourists with $7.4 billion spent; by 2019 Dubai had jumped 18 places to be ranked 1st, with tourists in Dubai spending an estimated $30.2 billion.[38]

In 2019, the UAE attracted nearly 16 million tourists, over one million of whom were Chinese nationals who came to enjoy sites such as the Burj Khalifa, the Palm Resort man-made archipelagos, and other attractions.[39] The Emirati government has capitalized on these existing attractions by creating events such as the annual The Tour UAE elite cycling race that began in 2019, which includes global competitors of the same level as those who compete in the Tour de France,[40] and the annual Dubai expo that brings in over 3 million tourists each year. Although the UAE does not have any historic Islamic sites, the recent construction of the Quranic Park in Dubai has increased religious tourism from all parts of the Middle East. Last month, the Emirati government extended the length of a tourist visa to five years in support of increasing tourism and in an attempt to improve relations with other nations.[41]

The UAE has also made significant efforts to become a competitive economy. To incentivize foreign business investments, of which the UAE received about $10.4 billion in 2017,[42] the Emirati government has established 25 "free zones" which offer geographical areas without trade restrictions, customs fees, or corporate taxes and is therefore listed as the 9th freest economy in the 2019 Free Economy Index.[43] These free zones have greatly increased foreign business in the UAE, with more than 6,400 companies from 120 nations operating in just the Jebel Ali free zone.[44] While the UAE is a major global supplier of crude oil and a member of OPEC, the UAE Ministry of Finance has put plans in place to diversify towards non-oil-based revenue and has increased funding for related projects such as the government-owned technological community known as the Silicon Oasis.[45] As a result of these efforts, the UAE economy saw a $223 billion increase in international trade from the year 2010 to the year 2018 and was ranked as the most competitive economy in the Middle East and the most business-friendly government by the World Economic Forum in 2019.[46]

Tech and Political Tendencies Increase Likelihood of UAE Adopting Digital Authoritarianism

As a result of its *Vision 2021* agenda the UAE has emerged as a global technological power and is one of the most technologically forward-leaning nations in the world. The booming technology industry in the emirates of Dubai and Abu Dhabi gives a high degree of confidence that if the Emirati government were to decide to transition toward mass implementation of AI-

assisted digital surveillance, the nation would be fully capable of doing so. The UAE has already shown significant progression in its use of information technology throughout the nation, especially within Dubai and Abu Dhabi, with a major rise in the use of digital technology in government services over the past ten years. The UAE's ranking on the United Nations' survey of "e-governments," defined by the UN as governments utilizing the internet and world wide web for delivering official information and services to citizens, increased from 49th in 2010 to 21st in 2018, moving up 28 places in only eight years.[47] Similarly, the UAE has invested substantial resources into updating the information technology infrastructure of its major cities through updating surveillance systems and implementing systems such as the Huawei smart city platform.

The UAE has also invested considerably in AI research, forming the world's first National Council of Artificial Intelligence and first Minister of Artificial Intelligence.[48] The Dubai Future Foundation has invested in AI development initiatives such as the UAE AI and Robotics Award for Good, which asks participants from around the globe to develop and submit advanced uses for AI across various industries.[49] In an effort to transform all Emirati citizens into an AI-knowledgeable population, the UAE has created AI summer youth camps involving over 10,000 student participants. These camps aim to help students understand the impact of artificial intelligence across different sectors and provide an opportunity to advance their AI development skills.[50] The UAE has already started integrating AI technology in its law enforcement activities by using "AI Robo Cops" in public spaces to assist traditional law enforcement.[51]

The implementation of enhanced digital surveillance is also likely to be facilitated by the high rate of internet usage within the UAE. An estimated 98.9% of the Emirati population were active internet users in 2019—in comparison, only an estimated 86% of the US population accessed the internet in 2019.[52] With so much of the population consistently accessing the internet and over 95% of the population owning social media accounts,[53] the Emirati government has the capacity to track most of its population via online monitoring—giving it a solid base for the implementation of advanced mass surveillance.

The increasing technological capacity of the UAE demonstrates that the nation has modernized significantly compared to its Middle East neighbors. Interestingly, the UAE is also considered to be the most liberal and open culture among the Gulf states; however, that is a relative threshold and the Emirati government still demonstrates authoritarian tendencies that may cause Chinese efforts to export digital authoritarianism to be particularly successful in the UAE. The Emirati government, considered a federal presidential monarchy, has distinct authoritarian leanings and has been criticized by organizations such as Amnesty International and Human Rights Watch for its harsh treatment of individuals who have spoken out against the Emirati government, or those who "sully the prestige and reputation of the state."[54] The US State Department 2019 Report on Human Rights lists "significant human rights issues" found in the UAE including arbitrary arrest and detention, undue restrictions on free expression, censorship, and substantial interference with the rights of peaceful assembly and protest.[55]

Although the state claims to be "extremely tolerant and accepting of all cultures and ideas" Freedom House has listed the nation as "Not Free" every year since it began its freedom index,[56] and Reporters Without Borders ranks the UAE as low as number 133 on the Freedom of the Press Index.[57] Journalists critical of the regime have endured censorship and legal

consequences for free expression, such as the Emirati blogger who was convicted of publishing material damaging to the regime and sentenced to at least ten years in prison.[58] The UAE has also invested in online censorship and monitoring systems which bear a concerning resemblance to those used by the Chinese government. Emirati citizens and regional newspapers recently accused the government of planting eavesdropping software on the popular Middle Eastern chat app ToTok.[59] The regime has also blocked a number of video chat applications such as Skype and Facetime because they were unable to censor or view the conversations facilitated by the apps.[60]

The Emirati government has justified these actions as necessary to protect the public from imminent threats. While Western nations object to many of the methods employed by the regime, it is acknowledged beyond dispute that the UAE faces a number of external threats. The most widely recognized threat is that of terrorist activity from extremist groups such as ISIS, Al-Qaeda, and Hezbollah. While attacks on UAE soil have been fairly limited, the central location of the UAE and its powerful financial district make the nation a prime location for the financing and organizational side of terrorist activity.[61] Additionally, the UAE's close geographic proximity to the ongoing conflict in Yemen and the unstable Islamic Republic of Iran warrant concern over Emirati national security. Compounding the regime's concerns from external threats is the possibility of a late-blooming popular revolt such as those that occurred throughout the MENA region during the Arab Spring. Although the UAE did not experience an uprising as many of its northern neighbors did, the influence of the Arab Spring can still be seen among the population and the Emirati regime is most likely concerned that a popular revolt may still occur.[62] These external and internal threats to the stability of the regime are viewed by the Emirati government as justification for the expansion of digital authoritarianism within the nation. Additionally, the UAE may view the COVID-19 pandemic, especially given the nation's close proximity to hard-hit Iran, as further justification for the adoption of mass-surveillance systems.

Resiliency in US-UAE Alliance and Global Technology Use Crucial in Protecting US Interests

As the UAE approaches the Chinese model of digital authoritarianism and expands its budding partnership with China, it is crucial that the US determine how it can foster positive resilience in the face of this transition. Resilience in this setting takes the form of a robust alliance with the UAE, maintaining influence in the Middle East without necessarily requiring the assistance of the UAE, and limiting the opportunity for China to displace US soft power and democratic values through China's global expansion of authoritarian technology.

First, the US must make a greater effort to strengthen its relationship with the United Arab Emirates in order to maintain a robust relationship despite the UAE's progress towards a Chinese model of digital authoritarianism. It is important that the US-UAE alliance remain a mutually beneficial arrangement in which the US is as important to the UAE as the UAE is to the US. The US can bolster this alliance by expanding the positive partnerships already in place. US leadership can begin by reaffirming to the Emirati government how much the US values the nations' military alliance and demonstrate that commitment by increasing military cooperation. This could be accomplished by increasing the number of joint training operations, reassessing arms sales restrictions, and improving intelligence sharing on issues that concern both US and UAE national security such as Iranian movements and terrorist activity. Through these actions

the US can reassure the UAE that it is viewed as an equal partner and remind it that the two nations share several common objectives and adversaries.

Economic and diplomatic actions can also serve to strengthen the US-UAE relationship. An increased US business presence in the UAE can solidify the economic ties between the two nations and decrease the likelihood that the UAE will pivot sharply away from the US economy in favor of the Chinese economy. Additionally, the US can increase knowledge and cultural exchange programs, such as student exchange programs and bilateral development programs, and invite Emirati citizens to spend time working at or with US institutions. Similarly, the US can improve personal relationships between US and UAE leaders by hosting more frequent state visits by Emirati leaders and having US leaders visit US military bases located in the UAE.

While the US can remain hopeful that such actions will help dissuade the UAE from moving ideologically closer to China, a plan must also be developed to protect US interests in the event that such a transition increases in magnitude. In order to protect US access to oil suppliers and maintain a positive and substantive influence in the Gulf region, it may be helpful for the US to evaluate other locations for US military bases within the region and strengthen its military alliances with other Gulf allies such as Saudi Arabia and Oman—these alliances may become crucial to keeping the Strait of Hormuz open. It would also be beneficial for the US to increase the resilience of its oil supply in the event that importing oil from the Gulf region, and particularly through the Strait, becomes difficult. Although it is not realistic for the US to halt or even drastically decrease imports through the Strait of Hormuz due to the location of most regional oil refineries and pipelines,[63] the US can partially shift its imports away from that route by increasing oil purchases from other current suppliers that are in more geopolitically stable positions. In addition, even though the US has historically imported more crude oil than it exports, the Energy Information Administration projects that the US will become a sustainable net exporter of crude oil by the end of 2020 as a result of the recent rise in shale oil production.[64] This new position allows the US to shift its consumption toward domestic oil and decrease its dependence on foreign production. Such an increase will increase resilience in US oil supply by minimizing its susceptibility to foreign regional conflict. The US can further insulate its energy supply against foreign shockwaves by increasing development and use of renewable energy sources, such as wind, solar, and nuclear.

Another concern is that the UAE's progress towards the Chinese model of digital authoritarianism is likely to encourage other nations to adopt similar technologies and practices, especially the implementation of smart city systems. As government use of AI-assisted city infrastructure increases, nations will look to China as an example because China has presented itself as both the technical and ideological leader and trendsetter in this field. In order to limit China's influence and preserve US soft power and the influence of its democratic norms, the US must also emerge as a leader in this area. If the US can demarcate a clear course to increase use of smart city technology while protecting human rights and preventing bias and abuses, the US can show that it is possible to engage the benefits of a networked "smart city" without having a "surveillance city." The first step towards achieving this is setting an industry standard for privacy protection by instituting new legislation and clarifying existing legislation governing the development and use of such technologies. The American Civil Liberties Union and other civil rights organizations have reasonably argued that as part of this legislation, national and local

administrations must show full transparency and fully involve the public in the decision to adopt such technologies and the capabilities and use of each system.[65]

Along with crafting legislation to ensure the protection of human and civil rights in the high-tech era, the US technology industry must take more of a leadership role in this domain, modeling both business innovation and democratic values in back-end development and front-end implementation and use. Although US companies such as Microsoft and Intel have made notable strides in developing smart city technologies, they are not considered the global leaders in the field. Foreign companies, especially Huawei, ZTE, and Nokia, are thought of by most as the top in the industry. If US companies embodying the best of US standards become leaders in the field, the US as a whole may reclaim the opportunity to become a strategic leader and trendsetter in providing an example of the democratic use of artificial intelligence, digital surveillance, and smart city technologies. Development of such technologies can be stimulated in the US by increasing research funding into this field through grants and providing financial incentives such as tax breaks for private companies developing related systems within legislated guidelines.

Finally, the US must recognize the importance of timely action on this issue given the significantly increased pressure some countries are feeling to adopt Chinese-style surveillance practices a result of the COVID-19 pandemic. China's reasonably successful containment of the virus using mass surveillance and location monitoring techniques such as digitally invasive versions of contact tracing[66] may incentivize nations who would not normally adopt such methods to incorporate surveillance programs into their governance models as a means of fighting the pandemic and keeping infection rates low as society resumes. Adoption of such practices, even if only meant as temporary measures, will pave the way for continued and widespread use of digital surveillance and may make developed nations more comfortable with extensive surveillance measures—including those straying into the domain of digital authoritarianism—in the future. If the US can develop similar digital platforms aimed at curbing the spread of COVID-19 without sacrificing human and civil rights, other nations will at least have an alternative model to the digitally invasive versions used by the Chinese government. By taking these steps, the US stands a chance at becoming an alternative example and leader in the field and maintaining the portion of its global democratic soft power that is threatened by China's technological leadership.

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